BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
Lucas M. Neas	Health Scientist (Epidemiologist)
eRA COMMONS USER NAME	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Purdue University	B.A.	1974	Political Science
W.V. College of Graduate Studies	M.S.E.	1983	Industrial Engineering
Harvard School of Public Health	Sc.D.	1991	Epidemiology

A. Positions and Honors.

Positions and Employment

1975-1986 Vital Events Statistician and Research Analyst, West Virginia Department of Health
1987-1991 Research Assistant, Harvard Six Cities Study, Harvard School of Public Health
1991-1992 Research Fellow in Medicine, Brigham and Women's Hospital, Boston, MA
1992-1998 Assistant Professor of Environmental Health and Epidemiology, Harvard School of Public Health
1993-1998 Instructor in Medicine, Channing Laboratory, Harvard Medical School
1995 Visiting Scientist, GSF-Forschungszentrum fur Umwelt und Gesundheit, Neuherberg, Germany
1998- Health Scientist (Epidemiologist), Epidemiology and Biomarkers Branch, Human Studies Division, National Health Effects and Exposure Research Laboratory, US Environmental Protection Agency
1998- Adjunct Assistant Professor of Environmental Health, Harvard School of Public Health
1998- Adjunct Associate Professor of Epidemiology, University of North Carolina at Chapel Hill

Major professional service

1994 Task Group, Environmental Health Criteria for Nitrogen Oxides, WHO
1995 Working Group, Indoor Air Quality Guidelines for Europe, WHO
1995-1998 Human Subjects Committee, Harvard School of Public Health
2000-2001 Nominating Committee, Environmental and Occupational Health Assembly, American Thoracic Society
2005- Program Committee, Environmental and Occupational Health Assembly, American Thoracic Society
2005- Particulate Matter Research Steering Committee, US EPA
2005-2006 International Science Advisory Committee, International Society for Environmental Epidemiology

B. Selected peer-reviewed publications (in chronological order).

1. Neas LM, Dockery DW, Ware JH, Spengler JD, Speizer FE, Ferris BF Jr. The association of indoor nitrogen dioxide with respiratory symptoms and pulmonary function in children. Am J Epidemiol, 1991; 134(2):204-19.
2. Ware JH, Spengler JD, Neas LM, Samet JM, Wagner GR, Coultas D, Ozkaynak H, Schwab M. Respiratory and irritant health effects of ambient volatile organic compounds: The Kanawha County Health Study. Am J Epidemiol, 1993; 137:1287-1301.
3. Neas LM, Ware JH, Dockery DW, Spengler JD, Speizer FE, Ferris BF Jr. Concentration of indoor particulate matter as a determinant of respiratory health in children. Am J Epidemiol, 1994; 139:1088-99.
4. Neas LM, Dockery DW, Koutrakis P, Tollerud DJ, Speizer FE, . The association of ambient air pollution with twice daily peak expiratory flow measurements in children. Am J Epidemiol, 1995; 141:111-22.
5. Neas LM, Schwartz J. The determinants of pulmonary diffusing capacity in a national sample of US adults. Am J Respir Crit Care Med, 1996; 153:656-64.
6. Neas LM, Dockery DW, Burge H, Koutrakis P, Speizer FE. Fungus spores, air pollutants and other determinants of peak expiratory flow rate in children. Am J Epidemiol 1996; 143:797-807.
7. Raizenne M, Neas LM, Damokosh AI, Dockery DW, Spengler JD, Koutrakis P, Ware JH, Speizer FE. Health effect of acid aerosols on North American children: pulmonary function. Environ Health Perspect 1996; 104:500-505.
8. Schwartz J, Dockery DW, Neas LM. Is daily mortality associated specifically with fine particles? J Air Waste Manage Assoc 1996; 46:927-939.

9. Neas LM, Schwartz J. Pulmonary function levels as predictors of mortality in a national sample of US adults. Am J Epidemiol 1998; 147:1011-18.
10. Neas LM, Dockery DW, Koutrakis P, Speizer FE. Fine particles and peak flow in children: acidity versus mass. Epidemiology 1999; 10:550-3.
11. Neas LM, Schwartz J, Dockery DW. A case-crossover analysis of air pollution and mortality in Philadelphia. Environ Health Perspect 1999; 107:629-31.
12. Laden F, Neas LM, Tolbert PE, Holmes MD, Hankinson SE, Spiegelman D, Speizer FE, Hunter DJ. Electric blanket use and breast cancer in the Nurses' Health Study. Am J Epidemiol. 2000 Jul 1;152(1):41-9.
13. Neas LM. Fine particulate matter and cardiovascular disease. Fuel Processing Technology 2000; 65-66:55-67.
14. Laden F, Neas LM,Dockery DW, Schwartz J. Association of fine particulate matter from different sources with daily mortality in six U.S. cities. Environ Health Perspect 2000; 108:941-7.
15. Mortimer KM, Tager IB, Dockery DW, Neas LM, Redline S. The effect of ozone on inner-city children with asthma: identification of susceptible subgroups. Am J Respir Crit Care Med 2000; 162:1838-45.
16. Creason J, Neas L, Shy C, Williams R, Sheldon L, Liao D, Walsh D. Particulate matter and heart rate among elderly retirees: The Baltimore 1998 PM study. J Exposure Anal Environ Epidemiol 2001; 11:116-22.
17. von Mutius E, Schwartz J, Neas LM, Dockery D, Weiss ST. Relation of body mass index to asthma and atopy in children: the National Health and Nutrition Examination Study III. Thorax. 2001 Nov;56(11):835-8.
18. Heinrich J, Hoelscher B, Frye C, Meyer I, Pitz M, Cyrys J, Wjst M, Neas L, Wichmann HE. Improved air quality in reunified Germany and decreases in respiratory symptoms. Epidemiology. 2002 Jul;13(4):394-401.
19. Wallace LA, Mitchell H, O'Connor GT, Neas L, Lippmann M, Kattan M, Koenig J, Stout JW, Vaughn BJ, Wallace D, Walter M, Adams K, Liu LJ; Inner-City Asthma Study. Particle concentrations in inner-city homes of children with asthma: the effect of smoking, cooking, and outdoor pollution. Environ Health Perspect. 2003 Jul;111(9):1265-72.
20. Neas LM. Methodological Issues in the Use of Generalized Additive Models for the Analysis of Particulate Matter Health Effects. Conference proceedings for 9th International Inhalation Symposium on Effects of Air Contaminants on the Respiratory Tract - Interpretations from Molecules to Meta Analysis sponsored by the Fraunhofer Institute of Toxicology and Experimental Medicine and US EPA in Hanover, Germany, June 9-14, 2003.
21. Mukerjee S, Norris GA, Smith LA, Noble CA, Neas LM, Özkaynak AH, Gonzales M. Receptor Model Comparisons and Wind Direction Analyses of Volatile Organic Compounds and Submicrometer Particles in an Arid, Binational, Urban Airshed. Environ Sci Technol. 2004 Apr 15;38(8):2317-27.
22. Riediker M, Cascio WE, Griggs TR, Herbst MC, Bromberg PA, Neas L, Williams RW, Devlin RB. Particulate matter exposure in cars is associated with cardiovascular effects in healthy young men. Am J Respir Crit Care Med. 2004 Apr 15;169(8):934-40.
23. Mukerjee S, Smith LA, Norris GA, Morandi MT, Gonzales M, Noble CA, Neas LM, Ozkaynak AH. Field method comparison between passive air samplers and continuous monitors for Vocs and NO2 in El Paso, Texas. J Air Waste Manag Assoc. 2004 Mar;54(3):307-19
24. Gonzales M, Qualls C, Hudgens E, Neas L. Characterization of a spatial gradient of nitrogen dioxide across a United States-Mexico Border City during winter. Science of the Total Environment 2005; 337: 163-173.
25. Sagiv SK, Mendola P, Loomis D, Herring AH, Neas LM, Savitz DA, Poole C. A time-series analysis of air pollution and preterm birth in Pennsylvania, 1997-2001. Environ Health Perspect. 2005 May;113(5):602-6.
26. Neas LM. New Developments in Source-specific Research Into The Health Effects of Particulate Matter. Conference proceedings for the Fifth International Conference on Mercury, Trace Elements, SO_3, and Particulate Matter, September 18-21, 2005, Arlington, VA.
27. Mar TF, Koenig JQ, Jansen K, Sullivan J, Kaufman J, Trenga CA, Siahpush SH, Liu LJ, Neas L.. Fine particulate air pollution and cardiorespiratory effects in the elderly. Epidemiology. 2005 Sep;16(5):681-7.
28. Thurston GD, Ito K, Mar T, Christensen WF, Eatough DJ, Henry RC, Kim E, Laden F, Lall R, Larson TV, Liu H, Neas L, Pinto J, Stolzel M, Suh H, Hopke PK. Workgroup report: workshop on source apportionment of particulate matter health effects--intercomparison of results and implications. Environ Health Perspect. 2005 Dec;113(12):1768-74.
29. Ito K, Christensen WF, Eatough DJ, Henry RC, Kim E, Laden F, Lall R, Larson TV, Neas L, Hopke PK, Thurston GD. PM source apportionment and health effects: 2. An investigation of intermethod variability in associations between source-apportioned fine particle mass and daily mortality in Washington, DC. J Expo Anal Environ Epidemiol. 2005 Nov 23;
30. Mar TF, Ito K, Koenig JQ, Larson TV, Eatough DJ, Henry RC, Kim E, Laden F, Lall R, Neas L, Stolzel M, Paatero P, Hopke PK, Thurston GD. PM source apportionment and health effects. 3. Investigation of inter-method variations in associations between estimated source contributions of PM(2.5) and daily mortality in Phoenix, AZ. J Expo Anal Environ Epidemiol. 2005 Nov 16;
31. Hopke PK, Ito K, Mar T, Christensen WF, Eatough DJ, Henry RC, Kim E, Laden F, Lall R, Larson TV, Liu H, Neas L, Pinto J, Stolzel M, Suh H, Paatero P, Thurston GD. PM source apportionment and health effects: 1. Intercomparison of source apportionment results. J Expo Anal Environ Epidemiol. 2005 Oct 12;

C. Research Support.

Ongoing Research

EPA-funded extension to NIH-funded study
Inner-City Air Pollution component of the Inner-City Asthma Study
Role of daily variation of ambient air pollutants in the increased symptoms and reduced lung function among inner-city children with moderate to severe asthma.
Role: Co-Investigator / EPA Project Officer

EPA internal study
El Paso Children's Health Study
Role of proximity-to-roadways in the development of allergies and asthma among schoolchildren in El Paso, TX.
Role: Principal Investigator

EPA-funded internal study
Pediatric Asthma and Childhood Environment Study (PACES)
Respiratory and immunologic effects of daily variation in ambient exposures among children with persistent asthma conducted in collaboration with the UNC Center for Environmental Medicine, Asthma, and Lung Biology.
Role: Co-Principal Investigator

EPA internal study
Detroit Children's Health Study
Role of proximity-to-roadways in the development of allergies and asthma among schoolchildren in the Detroit, MI metropolitan area.
Role: Principal Investigator

Completed Research

EPA-funded internal study
Car-related Occupational Particulate Matter and Air Toxics Exposures to Patrol Troopers Study (COPPS)
Cardiovascular effects of exposures within motor vehicles among health young men conducted in collaboration with the UNC Center for Environmental Medicine, Asthma, and Lung Biology.
Role: Co-Investigator